

Workshop on Question Evaluation Methods

Summary

The Question Evaluation Methods Workshop (QEM) was held at the National Center for Health Statistics to examine various question evaluation methods as well as to discuss the impact of question design and evaluation on survey data quality. The workshop, which was co-sponsored with the National Cancer Institute, was held October 21-23, 2009 with approximately 150 participants and audience members in attendance.

The purpose of the workshop was to provide a forum for comparing question evaluation methods, including behavior coding, cognitive interviewing, field-based data studies, item response theory modeling, latent class analysis, and split-sample experiments. Particular intent was to engage in an interdisciplinary and cross-method interrogation, focusing specifically on each method's strengths, weaknesses, and underlying assumptions. A primary paper followed by two response papers outlined key aspects of a method, followed by an in-depth discussion among workgroup participants. Because the primary focus for the workgroup was to actively compare methods, each primary author was asked to address the following topics:

- Description of the method
- How it is generally used and in what circumstances it is selected
- The type of data it produces and how these are analyzed
- How findings are documented
- The theoretical or epistemological assumptions underlying use of the method
- The type of knowledge or insight that the method can give regarding questionnaire functioning
- How problems in questions or sources of response error are characterized
- Ways in which the method might be misused or incorrectly conducted
- The capacity of the method for use in comparative studies, such as multi-cultural or cross-national evaluations
- How other methods best work in tandem with this method or within a mixed-method design
- Recommendations: Standards that should set as criteria for inclusion of results of this method within Q-Bank

Finally, closing remarks, which were presented by Norman Bradburn, Jennifer Madans, and Robert Groves, reflected on common themes across the papers and the ensuing discussions, and the relevance to Federal statistics.

A number of themes emerged from the paper presentations and discussion at the workshop. While impossible to cover them all in this brief synopsis, below is a summary:

- Broad consensus determined that measurement error requires renewed consideration. Federal statistical agencies have a fundamental obligation to produce valid and reliable data, and more attention should be placed on question evaluation and documentation. It was noted that survey budgets often do not reflect the impact that measurement error can have on survey estimates. The portion of a survey budget that is devoted to question evaluation is usually relatively small when compared with the portion of the budget that is allocated to minimizing other types of errors.
- It was established that the validation of measures is a particularly complex, methodological problem that requires a mixed-method approach. While quantitative methods are essential for understanding the magnitude and prevalence of error, they remain dependent on the interpretive power of qualitative methods. Furthermore, the use of multiple methods is important since each method has different strengths and weaknesses. Future research should examine how to optimally integrate methods as an analytic plan for question evaluation studies.
- Participants also discussed the role that Q-Bank should play in the future of question evaluation for Federal statistics. Because it provides access to question evaluation studies, the workgroup established that Q-Bank has begun to fill a critical void. And, although the database currently only houses cognitive test reports, it was established that other evaluation methods should be incorporated. It was also suggested that, in the process of integrating other methods, standards for question evaluation methodology would need to be researched and ultimately described as within the best practices for survey research.